					- 20	
QUERY CONTR	OL FORM	RTIS USE ONLY				
Application No.	10/081,396	Prepared by	Lois Stone	Tracking Number	5871514	
Examiner-GAU	Lee - 2874	Date	119/04	Week Date	12/8/03	
	•	No. of queries		IFW.		

JACKET					
a. Serial No.	f. Foreign Priority	k. Print Claim(s)	p. PTO-1449		
b. Applicant(s)	g. Disclaimer	I. Print Fig.	q. PTOL-85b		
c. Continuing Data	h. Microfiche Appendix	m. Searched Column	(r. Abstract)		
d. PCT	i. Title	n. PTO-270/328	s. Sheets/Figs		
e. Domestic Priority	j. Claims Allowed	o. PTO-892	t. Other		

SPECIFICATION	MESSAGE
a. Page Missing	
b. Text Continuity	Please provide a copy of the abstract.
c. Holes through Data	
d. Other Missing Text	
e. Illegible Text	
f. Duplicate Text	
g. Brief Description	
h. Sequence Listing	
i. Appendix	
i. Amendments	
k. Other	
•	
CLAIMS	
a. Claim(s) Missing	
b. Improper Dependency	
c. Duplicate Numbers	Thunk you
d. Incorrect Numbering	
e. Index Disagrees	initials (a)
f. Punctuation	RESPONSE See Copy attached
g. Amendments	
h. Bracketing	
· ·	
i. Missing Text	
j. Duplicate Text	
k. Other	
	initials

5

ABSTRACT OF THE DISCLOSURE

An optical router integrated in an InP-based substrate bonded to a single thermo-electric cooler for packet-based networks utilizing wavelength-division multiplexing (WDM) on silica fibers. Input and output arrayed waveguide gratings (AWGs) respectively demultiplex and multiplex the WDM signals to and from multiple transmission fibers. Input and output wavelength converters are connected between the input and outputs AWGs and a switching AWG. The output converts may include a tunable laser and interferometer formed in the same substrate. The header information is preferably carried out-of-channel from the WDM data signals, either in the same fiber band or a different one. Photodetectors and laser diodes are formed in the same substrate. Fast RF electronics are formed in GaAs chips and slower electronics formed in a silicon chip are bonded to the InP wafer